TECHNICAL DATASHEET

Grilamid L 20 G HL natural

PA12

EMS-GRIVORY
Material Database

Processing
Injection molding

Delivery form
Granules

Special Characteristics
Light stabilized or stable to light

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Product Information

Product designation according to ISO 1874:
PA 12, GHLR, 18-010N

Mechanical Properties	dry/cond	Unit	Standard
Tensile modulus	1600 / 1100	MPa	ISO 527
Yield stress	45 / 40	MPa	ISO 527
Yield strain	7.5 / 12	%	ISO 527
Nominal strain at break	>50 / >50	%	ISO 527
Stress at break	45 / 50	MPa	ISO 527
Charpy impact strength, +23°C	N / -	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	N / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength, +23°C	5 / 7	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	4 / 6	kJ/m²	ISO 179/1eA
Shore D hardness	70 / -		ISO 7619-1
Ball indentation hardness	- / 70	MPa	ISO 2039-1

Thermal Properties	dry/cond	Unit	Standard
Melting temperature, 10°C/min	178 / -	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	45 / -	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	115 / -	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	138 / -	°C	ISO 306
Max. usage temperature (long term)	90 - 110	°C	ISO 2578
Max. usage temperature (short term)	≤150	°C	EMS

Electrical Properties	dry/cond	Unit	Standard
Electric strength	- / 32	kV/mm	IEC 60243-1
Comparative tracking index	- / 550		IEC 60112
Volume resistivity	- / 1E11	Ohm*m	IEC 62631-3-1
Surface resistivity	- / 1E12	Ohm	IEC 62631-3-2

Grilamid L 20 G HL natural

General Properties	dry/cond	Unit	Standard
Density	1.01 / -	kg/m³	ISO 1183
Burning behav. at thickness h	HB / -	class	IEC 60695-11-10
Thickness tested	0.8 / -	mm	
Water absorption	1.5 / -	%	Sim. to ISO 62
Humidity absorption	0.7 / -	%	Sim. to ISO 62
Molding shrinkage, parallel	0.8 / -	%	ISO 294-4, 2577
Molding shrinkage, normal	0.85 / -	%	ISO 294-4, 2577

EMS-CHEMIE AG
Business Unit EMS-GRIVORY

Homepage: EMS-GRIVORY
eMail: welcome@emsgrivory.com

The values are intended to serve as an aid in preselecting materials and for an overview of the EMS-GRIVORY product range. The information contained in this publication is based on our present knowledge and experience. The given figures and data are guidance values and do not represent binding material specifications. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are given regarding products, design, data and information. The customer is not released from his obligation to investigate the products fitness and the suitability for the intended application, compliance with legal requirements and intellectual property rights. We reserve the right to change the information at any time and without prior notice. The information in this publication is not to be considered a contractual obligation and any liability whatsoever is expressly declined. For further questions about our products please contact our experts.

Created: Aug 25, 2026